
DEPARTMENT OF INTERIOR**Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposal To Determine *Cirsium vinaceum* To Be a Threatened Species and To Determine Its Critical Habitat**

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Proposed rule.

SUMMARY: The U.S. Fish and Wildlife Service proposes to list a plant, *Cirsium vinaceum* (Sacramento Mountains thistle), as a threatened species under the authority contained in the Endangered Species Act of 1973, as amended. Critical habitat is being proposed. This plant occurs in Otero County, New Mexico, in the Sacramento Mountains. There are fourteen known populations, which contain a total of 2,000-3,000 plants. Threats to this species are habitat destruction by livestock and water development, competition with introduced plant species, road construction, logging and recreational activities. A final determination that *Cirsium vinaceum* is a threatened species will implement the protection provided by the Endangered Species Act of 1973, as amended. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by July 16, 1984. Public hearing requests must be received by July 2, 1984.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Office, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103. Comments and materials received will be available for public inspection during normal business hours, by appointment, at the Service's Regional Office of Endangered Species, Region 2, 421 Gold Avenue, SW., Room 407, Albuquerque, New Mexico.

FOR FURTHER INFORMATION CONTACT: Dr. Russell L. Kologiski, Botanist, Region 2 Endangered Species staff (see **ADDRESSES** above) (505-766-3972).

SUPPLEMENTARY INFORMATION:**Background**

Cirsium vinaceum was first collected on July 12, 1899, by E. O. Wooten and was described by Wooten and Standley in 1913. *Cirsium vinaceum* is a perennial thistle that grows 1–2 meters tall. The stems are purple and highly branched. The leaves are up to 50 centimeters long and have deep, narrow, pointed lobes. The lobes on the leaf tips have short, slender, yellow spines. There are many purple flower heads per plant. Flowering occurs in July and August, possibly into September. Most of the populations occur on steep calcium carbonate deposits immediately adjacent to flowing springs. The deposits provide adequate moisture and the steepness limits access of livestock to the plants. One population is known from the moist banks of a stream and the adjacent wet meadows. Many of the plants in this population grow directly in the stream.

The dominant plant species associated with *Cirsium vinaceum* are Ponderosa Pine, Douglas Fir, Locust, and Gambel's Oak. *Cirsium vinaceum* is known from 2,400–2,700 meters elevation (Martin and Hutchins, 1980; Todsén, 1976).

Cirsium vinaceum was included in category 1 on the list of plants under review for threatened or endangered classification in the December 15, 1980, Federal Register (42 FR 82480) notice of review. Category 1 refers to taxa for which the Service presently has sufficient information to support the biological appropriateness of their being listed as endangered or threatened species. A 1978 status report and a 1979 status report supplement recommended threatened status for *Cirsium vinaceum*, as did the New Mexico Plant Recovery Team in 1983.

Because this species is treated as being under petition, a finding was made on October 13, 1983, that listing *Cirsium vinaceum* was warranted, but precluded by pending listing actions in accordance with section 4(b)(3)(B)(iii) of the Act. The present proposed rule constitutes the new required finding that a listing action is warranted for this species, and thus implements the action in accordance with section 4(b)(3)(B)(ii) of the Act.

Summary of Factors Affecting The Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations promulgated to implement the listing provisions of the Act (codified at 50 CFR Part 424; under revision to accommodate the 1982 amendments) set forth procedures for adding species to the Federal list. A species may be

determined to be an endangered or threatened species due to one or more of the five factors described in Section 4(a)(1) of the Act. Factors A and C especially pertain to *Cirsium vinaceum* Wooten and Standley (Sacramento Mountains thistle). All of these factors and their application to this species are as follows:

A. The present or threatened destruction, modification, or curtailment of its habitat or range. *Cirsium vinaceum* is known only from the Sacramento Mountains of southcentral New Mexico. The plants were historically known to occur along the moist banks of streams and in wet meadows throughout the Sacramento Mountains. The only population now known to grow in this type of habitat is located at the Lincoln National Forest-Mescalero Indian Reservation boundary. All other known populations are restricted to the areas around springs flowing from limestone rock (Fletcher, 1978). Fourteen populations are known, with a combined total of 2,000–3,000 plants; most of these populations consist of approximately 100 plants each. The populations at Bluff Springs and the population on the Lincoln National Forest-Mescalero Indian Reservation boundary contain approximately 200–300 plants each. Most of the populations are in the Lincoln National Forest, several are on private lands, and one is on the Mescalero Indian Reservation. This plant is dependent on springs or streams; reduction or removal of the water supply would reduce or eliminate the populations. Several populations of the *Cirsium* occur at Bluff Springs, an area heavily used by recreationists. Over-use for recreation or any human-caused deterioration of the area around the springs could harm the *Cirsium*. Road construction and logging activities could also impact the *Cirsium* populations and habitat if planning does not include consideration of this species (Fletcher, 1978). Ground disturbance by livestock is detrimental to this thistle and *Cirsium vinaceum* is slow to reestablish itself in disturbed areas (Fletcher, 1979).

B. Overutilization for commercial, recreational, scientific, or educational purposes. Commercial trade in this plant is not known to exist. Occasional plants might be cut by recreationists, or collected for scientific or educational purposes.

C. Disease or predation. The amount of predation on *Cirsium vinaceum* by herbivores is minimal. An occasional browsed flowering stalk or leaf has been observed, but the major detrimental effect of this species from livestock is ground disturbance.

D. The inadequacy of existing regulatory mechanisms. The *Cirsium* is protected from removal or damage in the National Forest by Federal regulations in 36 CFR 261.9 (b) through (d). A spring near Alamo Peak which supports a *Cirsium* population was to be developed for water use, but the Forest Service has agreed to provide enough water at this site to prevent deterioration of the habitat. The Forest Service has also agreed to protect two populations in Brown Canyon by establishing a no-cut and no-entry zone around them. These requirements will be imposed prior to any timber sales in the area (Abbott, 1983). Such planning and cooperation will be needed to protect other populations of the *Cirsium* and will be facilitated by this listing. No other State or Federal regulations protect this species.

E. Other natural or manmade factors affecting its continued existence. There are numerous areas in which *Cirsium vinaceum* formerly was distributed (such as the type locality) but in which it does not now occur, or exists only in low numbers. Many of these sites still appear to be suitable habitat for the species. The populations which formerly occurred on them apparently have been eliminated or reduced by livestock impacts or through competition with the introduced exotic plant species *Carduus nutans* and *Dipsacus sylvestris* (Fletcher, 1978, 1979).

The Service has carefully assessed the best scientific information available, regarding past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list *Cirsium vinaceum* as threatened. This is based on the fact that only 14 populations are known, each containing less than 3,000 plants, and these plants face potential threats from water depletion, and livestock trampling. Since most populations occur on Federal land, the species would benefit from a determination of critical habitat. A decision to take no action to list the species would be contrary to the Act's intent, and a decision to list as endangered would not accurately reflect the status of species as defined by the Act.

Critical Habitat

The Act defines "critical habitat" as:

(i) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Act, on which are found those physical or biological features (I) essential to the conservation of the

species, and (ii) which may require special management considerations or protection; and (ii) specific areas outside the geographic area occupied by the species at the time it is listed in accordance with the provisions of section 4 of this Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

The Act in section 4(a)(3) requires that critical habitat be designated to the maximum extent prudent and determinable concurrent with the determination that a species is endangered or threatened. Critical habitat for *Cirsium vinaceum* is proposed to be the area described below. Constituent elements are permanent surface water, usually associated with calcium carbonate deposits, and an undisturbed surface area that lacks livestock trampling. The proposed critical habitat area includes Lincoln National Forest lands, private lands, and Mescalero Apache Indian lands. The proposed critical habitat is T17S R12E, T16S R12E, T18S R12E, the east half of T17S R11E, the southeast quarter of T16S R11E, the south half of T15S R13E, and sections 14 and 15 of the north half of T15S R13E.

The critical habitat described above encompasses considerably more area than is actually occupied by *Cirsium vinaceum*. It is based, however, upon a recommendation from the U.S. Forest Service, which feels that this entire area is necessary because it contains all presently known populations, and will undoubtedly include any new populations that might be discovered in the future. The Fish and Wildlife Service believes that all of the proposed habitat is essential for the conservation of this species; it is large enough to allow for any expansion of the *Cirsium* as a result of recovery efforts, and is sufficiently defined to allow the Forest Service to manage and plan adequately for the species.

Section 4(b)(8) of the Act requires, for any proposed or final regulation that designates critical habitat, a brief description and evaluation of those activities that, in the opinion of the Secretary, may adversely modify such habitat or may be affected by such designation. Grazing and water development are the two greatest threats to *Cirsium vinaceum* and its habitat. This *Cirsium* grows in and immediately adjacent to springs and seeps. Trampling by livestock destroys the plants and the habitat. After a population is eliminated, reestablishment rarely occurs. Piping all of the water from springs for use

elsewhere would destroy *Cirsium* populations, as the species is dependent on surface water.

Protection of the *Cirsium* populations could be accomplished by fencing of the populations, particularly those accessible to livestock. Fencing of the springs and the surrounding *Cirsium* plants would protect the plants and habitat and allow grazing to continue with little reduction in allotment, if any. If water is removed from 500 to 1,000 meters downstream from the *Cirsium*, the impact to the plants could be avoided or reduced, and the water would still be available for use elsewhere. Improper placement of roads and logging activities could impact the *Cirsium* populations, and the effects of these could be minimized through proper planning. None of these possible protective measures should have a significant impact on the Forest Service. The Fish and Wildlife Service is working with the Forest Service, which has jurisdiction over most of the land involved in this action, to develop management and conservation programs for this species that will take into account the above factors.

Section 4(b)(2) of the Act requires the Service to consider economic and other impacts of specifying a particular area as critical habitat. The Service will evaluate the proposed critical habitat areas at the time of the final rule, after considering existing data and all new information obtained during the comment period regarding economic and other impacts of the designation.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protections, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by other Federal, State, and private agencies, groups and individuals. The Endangered Species Act provides for land acquisition and cooperation with states and requires that recovery plans be prepared and implemented by the Service following listing. The protection required by Federal agencies, and the taking prohibitions are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402, and are now under revision [see

proposal at 48 FR 29990; June 29, 1983]. Because it has been proposed for listing, Federal agencies are required under section 7(a) (4) to confer with the Service on any action that is likely to jeopardize the continued existence of this species or result in destruction or adverse modification of proposed critical habitat. This requirement will now apply to *Cirsium vinaceum*. When a species is officially listed, section 7(a) (2) requires Federal agencies to ensure that activities they authorize, fund, or carry out are not likely to jeopardize the continued existence of that species and to ensure that their actions are not likely to result in the destruction or adverse modification of its critical habitat. If an effect on the species or its critical habitat is expected, the Federal agency must enter into consultation with the Service.

Effects of water development projects on *Cirsium vinaceum* can be eliminated or minimized by cooperative efforts to allow protection of *Cirsium* populations and their habitat, and to enable water use to occur. If water is to be removed from a stream supporting a *Cirsium* population, diverting the water downstream from the population may leave enough water for its survival. Effects from grazing can be minimized by fencing *Cirsium* populations that are accessible to livestock.

The Act and its implementing regulations found at 50 CFR 17.71 and 17.72 set forth a series of general trade prohibitions and exceptions which apply to all threatened plant species. With respect to *Cirsium vinaceum* all trade prohibitions of section 9(a) (2) of the Act, implemented by 50 CFR 17.71, would apply. These prohibitions, in part, would make it illegal for any person subject to the jurisdiction of the United States to import or export, transport in interstate or foreign commerce in the course of a commercial activity, or sell or offer for sale this species in interstate or foreign commerce. Seeds from cultivated specimens of threatened plant species are exempt from these prohibitions provided that a statement of "cultivated origin" appears on their containers. Certain exceptions would apply to agents of the Service and State conservation agencies. The Act and 50 CFR 17.72 also provide for the issuance of permits to carry out otherwise prohibited activities involving threatened species under certain circumstances. International and interstate commercial trade in *Cirsium vinaceum* is not known to exist. It is anticipated that few trade permits involving plants of wild origin would ever be sought or issued since this plant

is not common in the wild and is not presently in cultivation.

Section 9(a)(2)(B) of the Act, as amended in 1982, states that it is unlawful to remove and reduce to possession endangered plant species from areas under Federal jurisdiction. Section 4(d) provides for the provision of such protection to threatened plant species through regulations. This protection will apply to *Cirsium vinaceum* once implementing regulations are issued. Proposed regulations implementing this prohibition were published on July 8, 1983 (48 CFR 31417). *Cirsium vinaceum* occurs on Federal lands, and hence this regulation, if finalized, will provide protection for the plants. It is anticipated that few removal and possession permits for the species will ever be requested.

Requests for copies of the regulations on plants, and inquiries regarding them, may be addressed to the Federal Wildlife Permit Office, U.S. Fish and Wildlife Service, Washington, D.C. 20240 (703/235-1903).

If this species is listed under the Act, the Service will review it to determine whether it should be considered for placement on the Annex of the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, which is implemented through section 8A(e) of the Act, and whether it could be considered for other appropriate treaties.

Public Comments Solicited

The Service intends that any final rule adopted will be as accurate and as effective as possible in the conservation of any endangered or threatened species. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, private interests, or any other party concerning any aspect of these proposed rules are hereby solicited. Comments particularly are sought concerning:

(1) Biological, commercial trade, or other relevant data pertaining to any threat (or lack thereof) to *Cirsium vinaceum*;

(2) The location of any additional populations of *Cirsium vinaceum* and the reasons why any habitat of this species should or should not be determined to be critical habitat as provided for by Section 4 of the Act;

(3) Additional information concerning the range and distribution of this species;

(4) Current or planned activities in the subject area and their possible impacts on *Cirsium vinaceum*; and

(5) Any foreseeable economic and other impacts resulting from the proposed critical habitat.

Final Promulgation of the regulations on *Cirsium vinaceum* will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of final regulations that differ from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests should be made in writing and addressed to the Regional Director, Region 2, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103.

National Environmental Policy Act

The Fish and Wildlife Service has determined that Environmental Assessments, as defined by the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. The reasons for this determination were published in the *Federal Register* (48 FR 49244) on October 25, 1983.

References

- Abbott, J.R. 1983. Personal communication, memo to Regional Forester R3, July 18, 1983.
- Fletcher, R. 1978. Status report: *Cirsium vinaceum*. U.S. Forest Service, Region 3, Albuquerque, New Mexico. 5 pp.
- . 1979. Status report: *Cirsium vinaceum*. U.S. Forest Service, Region 3, Albuquerque, New Mexico. 5 pp.
- Martin, W.C., and C.R. Hutchins. 1980. A flora of New Mexico. J. Cramer, Vaduz. 2591 pp.
- Todsen, T.K. 1976. *Cirsium vinaceum*. A threatened New Mexico species. Abstract of report presented at the annual meeting of the New Mexico Academy of Sciences, Albuquerque. 1 p.

Wooten, E.O., and P.C. Standley. 1913. Description of new plants preliminary to a report upon the flora of New Mexico. *Contributions to the U.S. National Herbarium*, Washington, D.C. 16:109-196.

Authors

The authors of this proposed rule are Sandra Limerick and Margaret Olwell, Endangered Species staff, U.S. Fish and Wildlife Service, Department of the Interior, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972). Status information was approved by R. Fletcher, U.S. Forest Service, Region 3, 517 Gold Avenue S.W. Albuquerque, New Mexico 87102. E. LaVerne Smith and John L. Paradiso of the Service's Washington Office of Endangered Species served as editors.

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulations Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the U.S. Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 reads as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*).

2. It is proposed to amend § 17.12(h) by adding the following in alphabetical order, under the family Asteraceae, to the List of Endangered and Threatened Plants:

§ 17.12 Endangered and threatened plants.

(h) * * *

Species		Historic range	Status	When listed	Critical habitat	Special rules
Scientific name	Common name					
Asteraceae—Aster family						
<i>Cirsium vinaceum</i>	Sacramento Mountains thistle	U.S.A. (NM)	Y		17.96(a)	NA

3. It is further proposed to amend § 17.96(a) by adding the critical habitat of *Cirsium vinaceum* as follows (The position of this and any following critical habitat entries under § 17.96(a) will be determined at the time of publication of a final rule):

§ 17.96 Critical habitat-plants.

(a) * * *

Critical Habitat for Sacramento Mountains Thistle

Family Asteraceae: *Cirsium vinaceum*

Cirsium vinaceum Wooten & Standley
 (Sacramento Mountains thistle)
 New Mexico: Otero County; T17S
 R12E, T16S R12E, T18S R12E, the
 east half of T17S R11E, the
 southeast quarter of T16S R11E, the
 south half of T15S R13E, and
 sections 14 and 15 of the north half
 of T15S R13E. Constituent elements

include permanent surface water,
 usually associated with calcium
 carbonate deposits, and an
 undisturbed habitat that lacks
 livestock trampling and grazing.

Dated: May 1984.

Susan Recce,

Acting Assistant Secretary for Fish and
 Wildlife and Parks.

